

REMARKS

Reconsideration of the above-identified Application is respectfully requested. Claims 1-17 and 20-28 are in the case. Claims 18 and 19 have been canceled. Claims 1, 7, 8, 12, and 17 have been amended. Claims 9-11, 14-16 and 19 have been re-written in independent form and renumbered to new Claims 22-28, respectively, which have thus been added.

Applicant acknowledges with appreciation the indication of the allowability of Claims 9-11, 14-16 and 19 if re-written in independent form including all of the limitations of the base claim and any intervening claims. These claims have been so re-written, and re-numbered as new Claims 22-28, respectively. For the convenience of the Examiner, an additional section under "Complete Listing of Claims" has been added, entitled "Claims 22-28 (Previous Claims 9-11, 14-16 and 19) in Mark-up Format", that includes the original Claims 9-11, 14-16 and 19, re-numbered as presented herein, and showing the changes that were made in the re-writing thereof to comply with this requirement. This re-numbering has been done to allow the originals of these re-written claims to remain with their dependency on the now re-written independent Claims 1, 12 and 17, as the case may be.

Therefore, these claims having been re-written as required, and re-numbered, it is respectfully submitted that Claims 22-28 are now allowable. Wherefore the allowance of Claims 22-28, and the reconsideration and withdrawal of the associated objection, are respectfully requested.

Regarding the rejection of Claims 1-8, 12, 17-18 and 20-21 under 35 U.S.C. § 102(e) as allegedly being anticipated by Maddux, independent Claims 1, 12 and 17 have been amended to overcome the rejection, and Claim 18 has been canceled, thereby rendering this rejection moot with respect thereto. Representative Claim 1 recites a data recovery device including "a number of sample components that obtain samples of data in a received encoded serial data stream at a number of phases, ... a number of transition detectors that

analyze consecutive data samples in order to identify transitions by comparing pairs of successive data samples and generating a transition signal during a bit time period at a predetermined logic level when a successive pair of data samples have different data levels ... and a combining circuit that generates a serial decoded data stream by combining the transition signals." This novel approach to data recovery, by simply comparing successive pairs of data samples, and generating a transition signal, that indicates a transition has been detected, and then simply combining the transition signals allows significantly simplified circuitry for such data recovery, compared with the prior art.

Thus, Maddux apparently relates to a technique for acquisition of an incoming data stream, and has as its goal rapid acquisition. While also determines edge locations, rather than generating a transition signal and simply combining those transition signals to provide a recovered data stream, instead he uses his detected edge locations to select which of his data samples (d_1 - d_N) is closest to the center of the data bit, what he considers the "best" sample for recovering data from the serial data stream, using his decision matrix logic 270, data pipeline logic 240 and multiplexing element 280. Maddux therefore neither teaches nor suggests the combination of elements of Claim 1, but, rather teaches away from such combination by requiring in his apparatus a complex arrangement of logic elements for recovery of the data from a "best" sample. The other art of record is even less relevant.

Therefore, for the above reasons it is respectfully submitted that for the above reasons Claim 1, as amended, is neither anticipated nor suggested by Maddux or, indeed, any of the art of record whether considered individually or in any combination and that therefore Claim 1 is allowable. Independent Claims 12 and 17, as amended, have similar limitations, and therefore, for the same reasons, are allowable as well. Claims 2-8 all depend, either directly or indirectly from Claim 1, and Claims 20-21 both depend from Claim 17, and so are allowable as well for the same reasons, as well as for the additional limitations

found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claim 13 under 35 U.S.C. § 103(a) as allegedly unpatentable over Maddux in view of Burns et al., Claim 12, from which Claim 13 depends, has been amended to overcome this rejection. The reasons for the allowability of Claim 12 over Maddux are set forth above. The patent to Burns et al. fails to cure the deficiencies of Maddux, having been cited merely to show a receiver including a clock recovery component. The other art of record is even less relevant.

Therefore, for the above reasons it is respectfully submitted that for the above reasons Claim 12, as amended, is neither anticipated nor suggested by Maddux, Burns et al., or, indeed, any of the art of record whether considered individually or in any combination and that therefore Claim 12 is allowable, with Claim 13, depending from Claim 12, being allowable for the same reasons, as well as for the additional limitations found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Finally, Claims 9-11, 14-16 and 19, each depending, directly or indirectly, from a respective allowable independent claim, are allowable as well, as well as for the additional limitations found therein.

It is respectfully submitted that the claims recite the patentably distinguishing features of the invention and that, taken together with the above remarks, the present application is now in proper form for allowance. Reconsideration of the application, as amended, and allowance of the claims are requested at an early date.

While it is believed that the instant amendment places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, the Applicants petition for an Extension of Time under 37 C.F.R. §1.136. Please charge any fees in connection with the filing of

this paper, including extension of time fees to the Deposit Account No. 20-0668 of Texas Instruments Incorporated.

Respectfully submitted,

/J. Dennis Moore/

J. Dennis Moore
Attorney for Applicant(s)
Reg. No. 28,885

Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265
Phone: (972) 917-5646
Fax: (972) 917-4418